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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/723,387	1	1/25/2003	John W. Simmons	Serie 6377 7955	
40582	7590	06/02/2005		EXAMINER	
AIR LIQUI		HEVARD SHITE	SPITZER, ROBERT H		
2700 POST OAK BOULEVARD, SUITE 1800 HOUSTON, TX 77056				ART UNIT	PAPER NUMBER
,				1724	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Occurred	10/723,387	SIMMONS				
Office Action Summary	Examiner	Art Unit				
	Robert H. Spitzer	1724				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed /s will be considered timely. It the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12 M	av 2005					
l	action is non-final.					
3) Since this application is in condition for allowar		osecution as to the merits is				
closed in accordance with the practice under E	·					
Disposition of Claims						
	the application					
 4)⊠ Claim(s) 1-9,12-16 and 19-36 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 						
5)⊠ Claim(s) <u>1,3-5,7,8 and 15</u> is/are allowed.						
6) Claim(s) 2,6,12-14,16 and 19-36 is/are rejected	d.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
	epted or b) objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1.☐ Certified copies of the priority documents	s have been received.	•				
2. Certified copies of the priority documents	s have been received in Applicat	ion No				
3. ☐ Copies of the certified copies of the prior		ed in this National Stage				
application from the International Bureau						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	Patent Application (PTO-152)				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office Ac	tion Summary	Part of Paper No./Mail Date 0601				

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DETAILED ACTION

1. Claims 1,3-5,7,8 and 15 are allowed.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 2,6,12-14,16 and 19-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is indefinite because in step (b) there is no direct antecedent basis for the recitation of "said gaseous feed mixture of at least two or more gas components", and in steps (c) and (e), there is no direct antecedent basis for the recitation of "said component or components", as the earlier recitation was to "at least one component". Claim 6 is indefinite because there is no-direct antecedent basis for the recitation of "said at least one gas component". Claim 9 is indefinite because it depends from indefinite claim 2. Claim 12 is indefinite because in step (b), there is no direct antecedent basis for the recitation of "said gaseous feed mixture of at least two or more gas components", and because in steps (c) and (e), there is no direct antecedent basis for the recitation of "said component or components", as the earlier recitation was to "at least one component". Claim 14 is indefinite because line 5 refers to "formula (1)", however, there is now no such formula in amended claim 12. Claim 13 is indefinite because it depends from indefinite claim 12. Claim 16 is indefinite because in steps (c) and (e), there is no direct antecedent basis for the recitation of "said component or components", as the earlier recitation was to "at least one component". Claim 24 is indefinite because there is no direct antecedent basis for

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the recitation of "said component or components". Claims 19-23,25 and 26 are indefinite because they depend from indefinite claim 16. Claim 27 is indefinite because in step (e), there is no direct antecedent basis for the recitation of "said component or components", as the earlier recitation was to "at least one component" and "at least two or more gas components". Claim 34 is indefinite because there is no direct antecedent basis for the recitation of "said permeators" in line 3, as line 2 recites "a permeator". Claims 28-33,35 and 36 are indefinite because they depend from indefinite claims 27 and 34.

- 4. Claims 2,6,12-14,16 and 19-36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
- 5. As all of the claims have either been allowed or indicated to be allowable upon appropriate amendment, any remarks made by applicants in their May 12, 2005 amendment are most and need not be answered by the examiner.
- 6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (571) 272-1167. The examiner can normally be reached on Monday-Thursday from (5:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 1, 2005

Robert H. Spitzer Primary Examiner Art Unit 1724

JUHR 1, 2005